

Work Order ID 147780

Tuesday, June 14, 2016 10:30:22 AM

147780

Page 1

Item ID: D205-633-024

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 7/8/2016 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: W Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D205-633	C								DAS 21 16-07-04 9-89
100	Document Control	0.00				DAS 27 9-89			
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D205-633-024	CHG001							
									JUN 29 2016
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							DAS 28 9-89
Packaging									JUN 16 2016
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00				DAS 27 9-89			
Quality Control									

B145536

JUN 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Picklist Print

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Parent Item: D205-633-024

D205-633-024

Parent Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016

Required Date: 7/8/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue Rev B dwg 07-11-19 DD verified by:EC Ipp RevB
11.07.26 per NCR 11-628 EC verified by:JLM IPP Rev:C 11.09.12
remove D3165-1 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-12A *AN4-12A* Bolt		Purchased	No			110	Each	145.0000	1	1			DAS 6 28 9-89
**													
				<u>Location</u>	<u>Loc Qty</u>		<u>Loc Code</u>						
				FG	10								
				120423	10								
				over003	125								
				m134606	125								
				ST344	10								
				m134180	10								
AN4-14A *AN4-14A* Bolt		Purchased	No			110	Each	293.0000	1	1			DAS 6 28 9-89
**													
				<u>Location</u>	<u>Loc Qty</u>		<u>Loc Code</u>						
				FG	5								
				122141	5								
				over003	250								
				M134754	100								
				M134943	150								
				ST344	38								
				M134508	1								
				M134573	37								

JUN 16 2016

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OTHER : ☐									

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Parent Item: D205-633-024

D205-633-024

Parent Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016

Required Date: 7/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-7A
Bolt

Purchased No

110 Each 100.0000 1 1

DAS
6 28
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST345

100

m134249

4

96

AN5-14A
Bolt

Purchased No

110 Each 39.0000 1 1

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST338

39

m133990

14

m134943

25

D2022-101
Spacer

Manufactured No

110 Each 104.0000 4 4

DAS
6 DAS
9-89 28
9-89

D2022-101

Location

Loc Qty

Loc Code

ST001

13

132703

13

ST012a

91

140201

46

145330

45

D2022-103
Spacer

Manufactured No

110 Each 32.0000 2 2

DAS
6 28
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST001

32

144660

32

JUN 18 2016

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							Lead hand / Supervisor Approval Verification		
					QC / QA Coordinator Approval				
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Page 5

Tuesday, June 14, 2016 10:30:21 AM

Work Order ID: 147780

147780

Parent Item: D205-633-024

D205-633-024

Parent Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016

Required Date: 7/8/2016

Start Qty: 1.00

Required Qty: 1.00

D2565-207

Manufactured No

110

Each

7.0000

1 1

D2565-207

Strut

**

DAS
28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST354

5

130207

5

ST355

2

116927

2

D2565-209

Manufactured No

110

Each

5.0000

1 1

D2565-209

Strut

**

DAS
28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST355

5

130208

5

D2565-211

Manufactured No

110

Each

8.0000

1 1

D2565-211

Strut

**

DAS
28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST355

8

116818

2

130209

6

D3437-043

Manufactured No

110

Each

4.0000

1 1

D3437-043

Aft Strut Assembly

**

DAS
28
6 9-89
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

Mezz

4

71509

4

D3438-042

Manufactured No

110

Each

0.0000

1 1

D3438-042

Weldment Assembly

**

JUN 16 2016

B145536

DAS
28
6 9-89
9-89

Tuesday, June 14, 2016 10:30:21 AM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

Picklist Print

Tuesday, June 14, 2016 10:30:21 AM

Work Order ID: 147780

147780

Parent Item: D205-633-024

D205-633-024

Parent Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016

Required Date: 7/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

110

Each

2,100.000

7

7

MS21042L 4

Locknut

DAS 6 28
9-89 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

GA

181

m133769

181

OVER007

1500

m134861

1000

m134955

500

ST303

325

m134762

325

ST305

94

m130922

94

7

MS21042L5

Purchased

No

110

Each

573.0000

2

2

MS21042L 5

Nut

DAS 6 28
9-89 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

GA

95

m127813

95

OVER007

250

m134509

100

m134955

150

ST303

228

m134055

6

m134676

22

m134762

200

2

JUN 17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Page 7

Tuesday, June 14, 2016 10:30:21 AM

Work Order ID: 147780

147780

Parent Item: D205-633-024

D205-633-024

Parent Item Name: Heli-Access-Step™ RH - 31" Extended Height Gear, Simplex Tank Compatible

Start Date: 6/14/2016

Required Date: 7/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J Purchased No

110 Each 3,477.000 14 14

NAS1149D0463.J

WASHER

DAS

DAS
6
8-89

28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
GA	86	
M132035	21	
M134508	65	
ST260a	2000	
M134852	1000	
M134943	1000	
ST263	1391	
M134754	1391	

14

NAS1149D0563J Purchased No

110 Each 935.0000 3 3

NAS1149D0563.J

Washer

DAS
28
9-89

DAS
6
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
GA	231	
m125807	2	
m133769	229	
ST263	605	
m134497	605	
ST269	99	
m128257	99	

3

JUN 16 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : _____									

REFERENCE ONLY

DART AEROSPACE LTD.

IIN-D205-633

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5.2 D205-633-021/-022/-023/-024/-025/-026 Heli-Access Step (Simplex Model 304 Fire Attack Tank Compatible)

QTY -021	QTY -022	QTY -023	QTY -024	QTY -025	QTY -026	Part Number	Description
X						D205-633-021	Heli-Access-Step™ (LH), High Gear
	X					D205-633-022	Heli-Access-Step™ (RH), High Gear
		X				D205-633-023	Heli-Access-Step™ (LH), Extended High Gear (31")
			X			D205-633-024	Heli-Access-Step™ (RH), Extended High Gear (31")
				X		D205-633-025	Heli-Access-Step™ (LH), Extended High Gear (39")
					X	D205-633-026	Heli-Access-Step™ (RH), Extended High Gear (39")
4	4	4	4	4	4	D2022-101	SPACER
2	2	2	2	2	2	D2022-103	SPACER
				1	1	D2562-005	STRUT
1	1					D2562-011	STRUT
		1	1			D2562-013	STRUT
1		1		1		D2563	WELDMENT ASSEMBLY
1	1					D2565-101	STRUT
1	1					D2565-103	STRUT
1	1					D2565-105	STRUT
1	1					D2565-107	STRUT
1	1					D2565-109	STRUT
*1	*1					D2565-111	STRUT
		1	1			D2565-201	STRUT
		1	1			D2565-203	STRUT
		1	1			D2565-205	STRUT
		1	1			D2565-207	STRUT
		1	1			D2565-209	STRUT
		*1	*1			D2565-211	STRUT
				1	1	D2565-301	STRUT
				1	1	D2565-303	STRUT
				1	1	D2565-305	STRUT
				1	1	D2565-307	STRUT
				1	1	D2565-309	STRUT
				*1	*1	D3165-1	SUPPORT ARM
1	1					D3437-041	AFT STRUT ASSEMBLY
		1	1			D3437-043	AFT STRUT ASSEMBLY
				1	1	D3437-045	AFT STRUT ASSEMBLY
	1		1		1	D3438-042	WELDMENT ASSEMBLY
1	1	1	1	1	1	AN4-5A	BOLT
4	4	3	3	3	3	AN4-6A	BOLT
1	1	1	1	1	1	AN4-7A	BOLT
1	1					AN4-11A	BOLT
		1	1	1	1	AN4-12A	BOLT
1	1	1	1	1	1	AN4-14A	BOLT
1	1	1	1	1	1	AN44-7A	EYEBOLT
1	1	1	1	1	1	AN5-14A	BOLT
16	16	14	14	14	14	AN960JD416	WASHER
3	3	3	3	3	3	AN960JD516	WASHER
8	8	7	7	7	7	MS21042L4	NUT (or MS21042-4)
2	2	2	2	2	2	MS21042L5	NUT (or MS21042-5)

* ONLY INSTALLED IF TANK IS REMOVED

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Revision: C
Date: 13.12.13